MEC Software

# Fixed Assets Tracking System

**Version 3**
**User Manual**

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Distributed By:

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## Introduction

The Fixed Assets Tracking System provides a convenient means for maintaining records of valuable assets. The single-user version of the software may be used on one computer, and is ideal for systems where one person will be managing the asset records. For larger applications, the network version maintains asset records on a shared central database which can be accessed from many workstations.

Each asset is uniquely identified with a barcode tracking label. Used with either fixed or portable scanners, the barcodes make it possible to quickly and accurately collect information about the location and movement of large numbers of assets.

The Fixed Assets System provides the following features:

- maintains detailed records on each asset
- provides check-out and check-in for temporary loans
- tracks current location and assigned department for each asset
- reconciles physical inventory
- prints barcode labels for identifying assets and locations

## Installation

Execute the setup.exe file on the release CD-ROM to start the installation process. The installer program will do almost all the work automatically. By default, the software will be installed in C:\Program Files\FixedAssets.

The release package includes several TrueType fonts for printing Code 39 barcodes using Word, Excel, and other standard software packages. These files (named *.ttf) are copied to the installation directory, but are not officially installed in Windows. To install these fonts, click on Start -> Settings -> Control Panel -> Fonts, and then click on File -> Install New Font and browse to the C:\Program Files\Fixed Assets folder. Select all of the fonts and click Install.

The Fixed Assets System normally signs on to databases as user Admin with no password. If the Microsoft Access databases on your system are password-protected you will need to add the following options to the command line or shortcut used to run the Fixed Assets program:

**/uid=**<*user identification*> **/pwd=**<*password*>

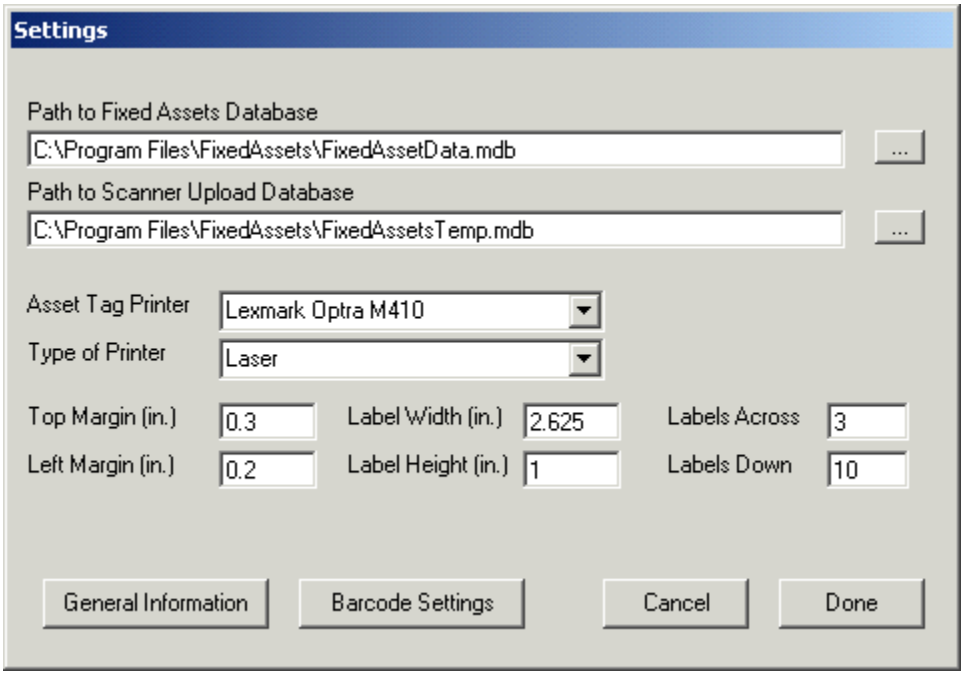
The first time you run the Fixed Assets program, you will be asked to enter a license key (found on the release CD-ROM). If you are installing this software as a demonstration, which limits you to 25 asset records, simply click on Install as Demonstration.

When the Main Menu appears, click on the Settings button. You will be asked to enter a password; this is not designed as a high security measure, only a means for deterring casual browsing. The password is:

**CONFIG**

The Settings screen will appear.

## Settings




Set the pathnames to the main FixedAssetData.mdb database file either by entering the pathname or by clicking on the button at the right end of the field to browse for the file. By default, the database file is installed in the C:\Program Files\FixedAssets directory. In a single-computer system, this default location is fine. However, in a networked system where the fixed assets data is to be centrally located and shared, set this field to point at the shared network copy of FixedAssetData.mdb. There should be one and only one copy of the database file in the system, and all workstations must point to it; be careful not to accidentally configure a workstation to point at a local copy of the database.

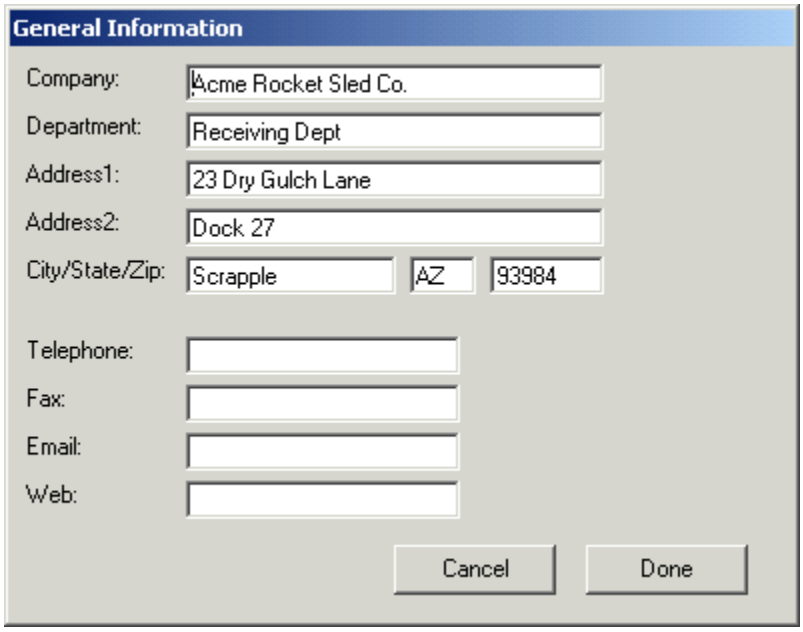
Set the pathname to the database file that will contain data uploaded from portable data scanners. The installation package includes a database file names FixedAssetTemp.mdb which contains the required ScannerUpload table; by default this file is installed in C:\Program Files\FixedAssets. For a detailed discussion of the scanner upload data, see the section *Data from Portable Barcode Scanners* later in this manual.

Select an *Asset Tag Printer* from the list of printers installed on your system. Specify the *Type of Printer*; choices include Laser, Inkjet, and Zebra label printers. ***Note:*** Zebra label printers should be installed on Windows as Generic/Text Only printers. The typical labels used in a laser or inkjet printer are 2.625” wide by 1.0” high and are arranged 3 across by 10 down on a standard letter size sheet. The typical labels used in a specialized label printer are 1.5” wide by 0.5” high, arranged in a single column of continuous labels.

Click on *General Information* to display company information that will be used on reports created by the system. Click on *Barcode Settings* to set information about the barcodes used by the system. Details about both these screens appear on the following page.

When finished with the *Settings* screen, click the Done button to save your changes and return to the Main Menu. Click *Cancel* to return to the *Main Menu* without saving.

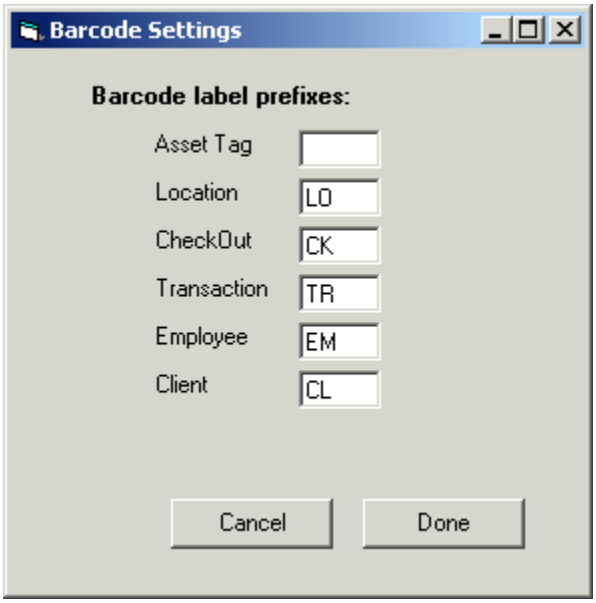
## General Information




Enter general information about your company or organization. This information will be used on forms and labels printed by the system.

Click *Done* to save your changes and return to the *Settings* screen. Click *Cancel* to return without saving.

## Barcode Settings

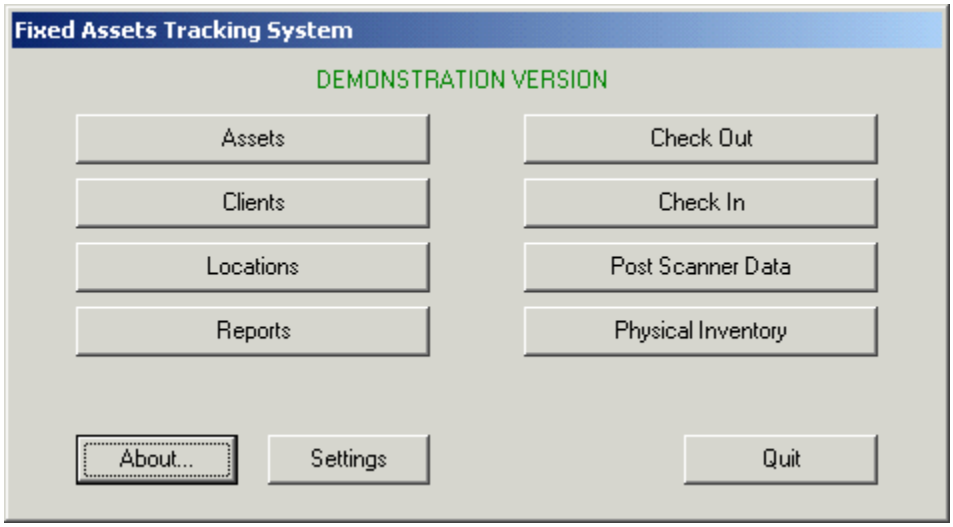



When reading barcodes, the system can easily tell one type of barcode from another through the use of prefixes. A prefix is generally one or two characters in length and identifies the type of information contained in the barcode. In the example above, barcodes which identify physical locations always begin with “LO”.

Note in the example that there is no Asset Tag prefix. If all types of barcode save one are identified by a prefix, it is easy to identify the one without a prefix by a process of elimination. In general, it is a good idea to identify all types of barcodes; in the example, Asset Tags might be identified by an “AT” prefix.

Click *Done* to save your changes and return to the *Settings* screen. Click *Cancel* to return without saving.

## The Main Menu




**Assets**
Locate an existing asset or create a new one; view and edit asset details.

**Clients**
Maintain the list of clients who routinely check out assets on a temporary basis.

**Locations**
Maintain the list of location codes that identify where assets might be kept.

**Reports**
Displays menu of available reports and labels.

**Check Out**
Check out assets on a temporary basis to a client

**Check In**
Note the return of previously checked-out assets

**Post Scanner Data**
Display and post data uploaded from portable or remote scanners

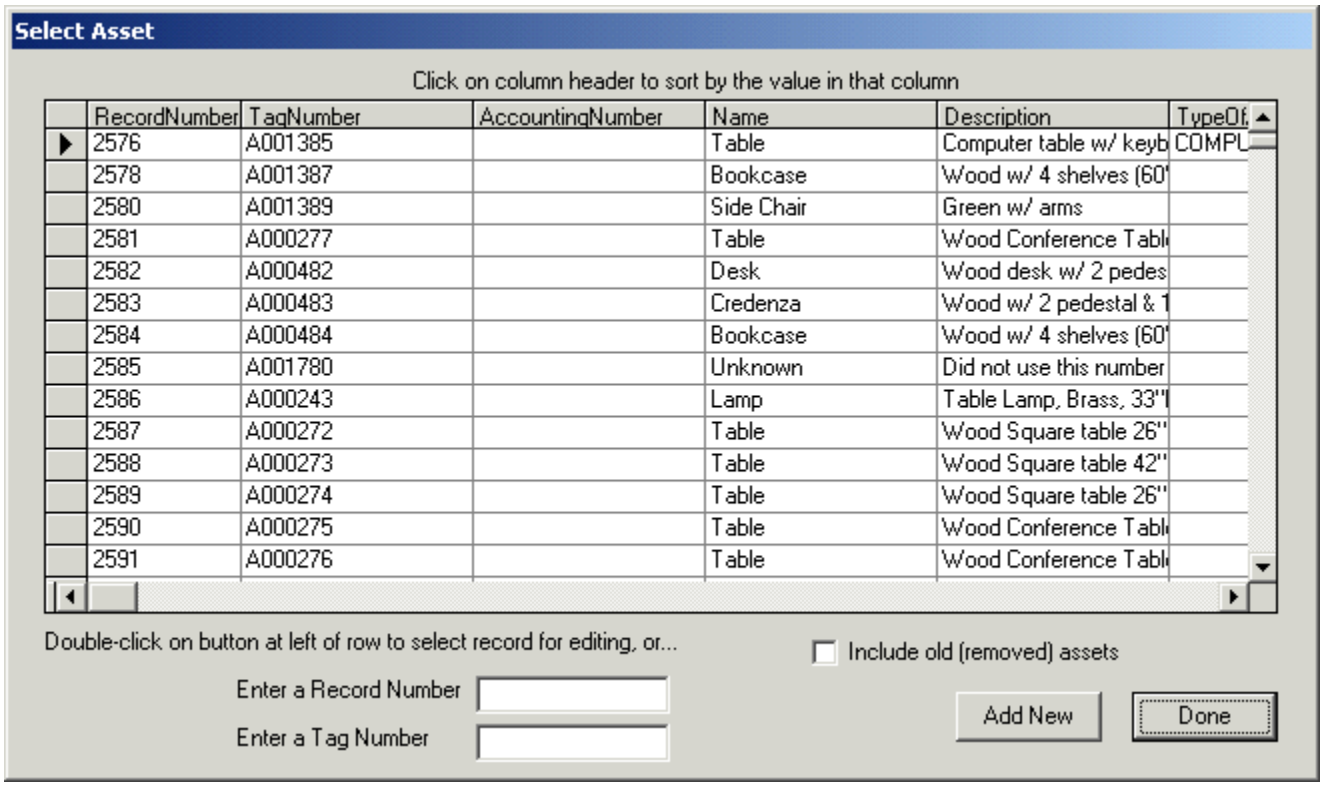
**Physical Inventory**
Display menu of functions for recording and reconciling physical inventory.

**About…**
Display version and copyright information

**Settings**
Display screen for editing the system settings (requires password)

**Quit**
Exit the program

## Asset Selection Screen


Select Asset
Click on column header to sort by the value in that column
RecordNumber
TagNumber
AccountingNumber
Name
Description
TypeOf
2576 A001385 Table Computer table w/ keyb COMPU
2578 A001387 Bookcase Wood w/ 4 shelves (60"
2580 A001389 Side Chair Green w/ arms
2581 A000277 Table Wood Conference Tabl
2582 A000482 Desk Wood desk w/ 2 pedes
2583 A000483 Credenza Wood w/ 2 pedestal & 1
2584 A000484 Bookcase Wood w/ 4 shelves (60"
2585 A001780 Unknown Did not use this number
2586 A000243 Lamp Table Lamp, Brass, 33"
2587 A000272 Table Wood Square table 26"
2588 A000273 Table Wood Square table 42"
2589 A000274 Table Wood Square table 26"
2590 A000275 Table Wood Conference Tabl
2591 A000276 Table Wood Conference Tabl
Double-click on button at left of row to select record for editing, or...
Include old (removed) assets
Enter a Record Number
Enter a Tag Number
Add New
Done

This screen displays a list of all assets currently on file in a spreadsheet format, and is used only for a quick look at asset information and to select an asset for detailed viewing. User the vertical and horizontal scroll bars to navigate around the form.

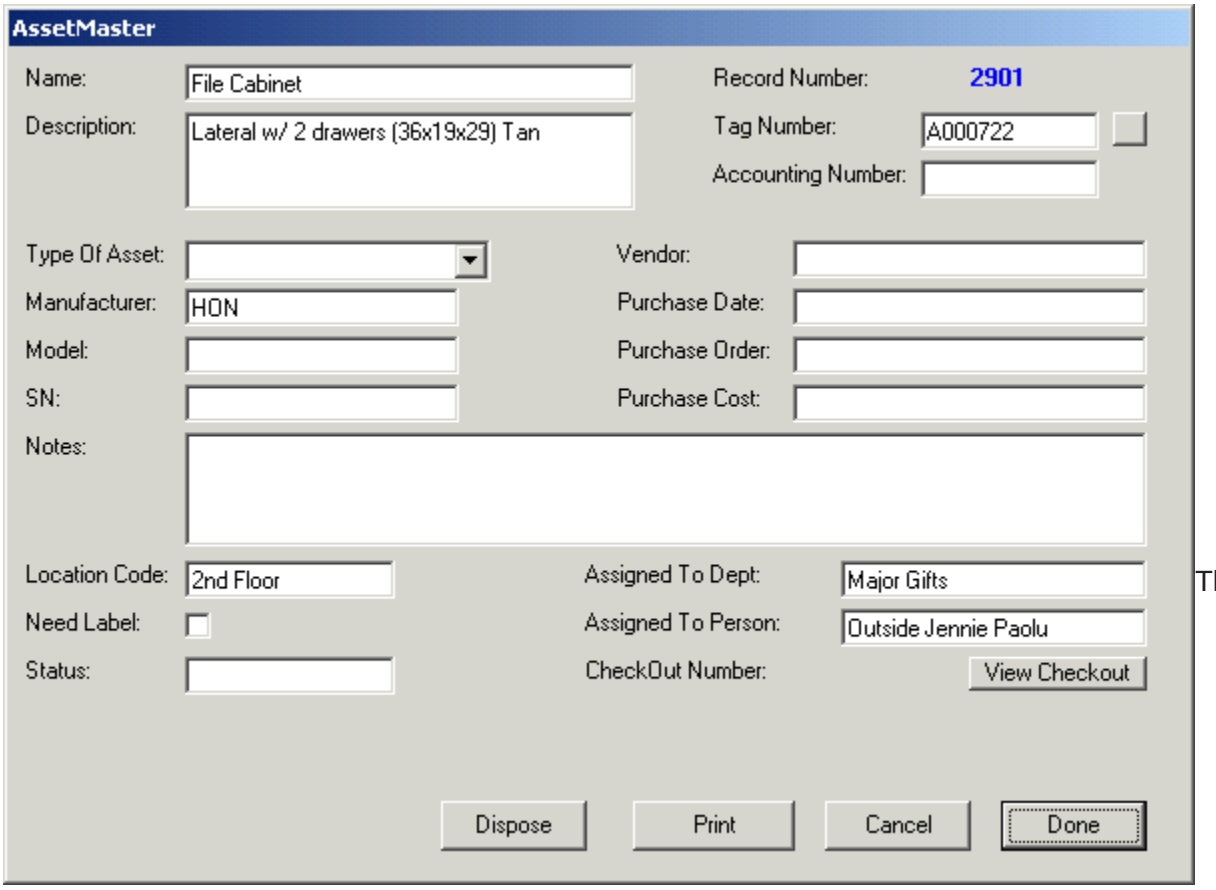
To sort the list, click on the title at the top of any column. The first click will resort the list in ascending order for that column; the next click will resort in descending order.

Assets which have been disposed of are still kept on file, although they are not normally displayed on this list. To include removed assets in the display, click the checkbox marked Include old assets.

To display details about a particular asset, double-click the gray button area at the left end of the desired row. You may also select an asset by entering its record number or tag number in the fieldes provided.

To add a new asset record, click the Add New button. A blank asset record will be created and displayed.

## Asset Detail Screen




This screen displays details about the selected asset.

Name — A descriptive name by which the item is commonly known within your organization. This name can be used to look up an asset without remembering the Record Number or Tag Number.

Description: — A description of the asset

Tag Number: — The identification number on the barcoded asset tag which is affixed to the item. This field is locked to prevent accidental alteration; to change the tag number, click the button to the right of the field.

Acctg Number: — For use in the event your accounting system uses a different identification number to track this asset.

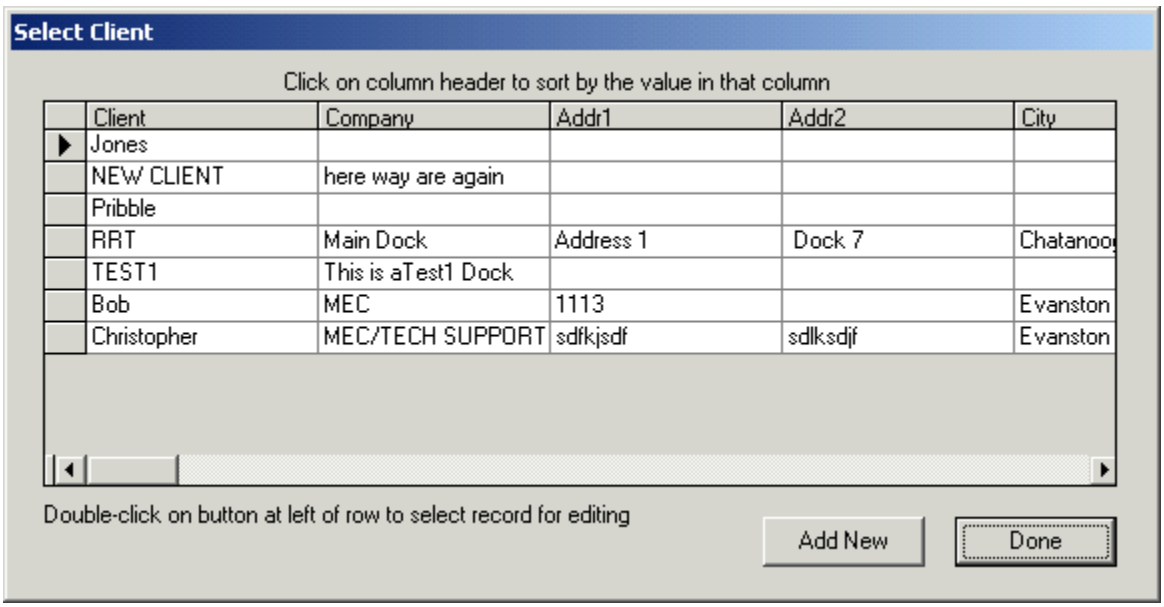
Type of Asset: — The general category or type of asset (furniture, eletronic equipment, etc.)

Manufacturer: — The company which made the item

Model: — The manufacturer's model number

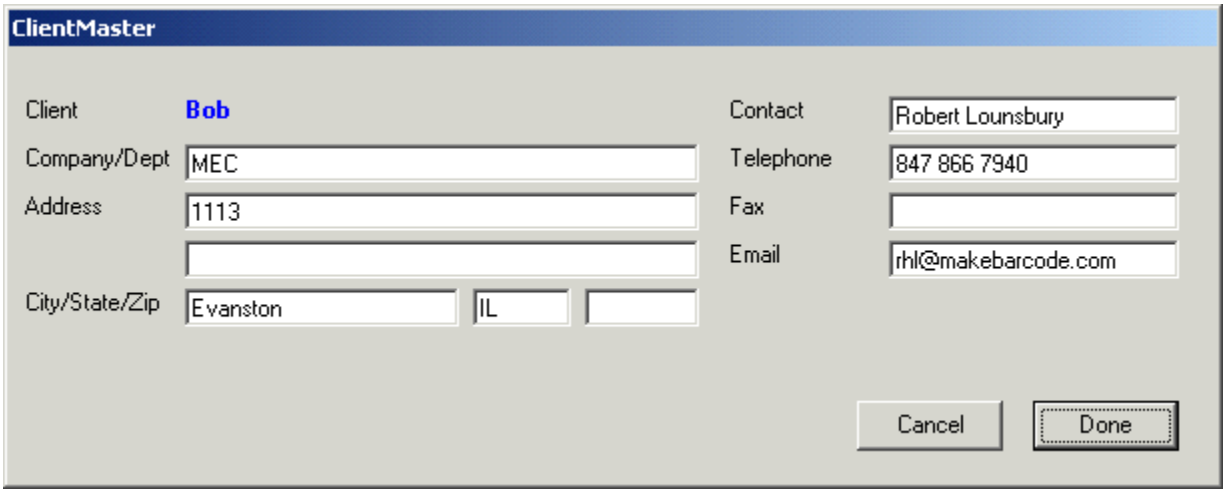
| | |
|---|---|
| SN: | The manufacturer's serial number |
| Vendor: | The supplier from whom the item was purchased |
| Purchase Date: | When purchased |
| Purchase Order: | The purchase order used to originally obtain the item |
| Purchase Cost: | The original cost of the item. |
| Notes: | Comments or remarks about the item… special characteristics, service problems, etc. |
| Location: | The code for the item's present location. The list of location codes is maintained using the Locations button on the main menu. When a location code is selected on the Asset Master screen the details of that location are automatically displayed: Site, Building, Room, and Area. |
| Assigned to Dept: | The Department to which this item is assigned, the group which holds custodial responsibility. |
| Assigned to Person: | The individual who holds custodial responsibility. |
| Check Out Number: | If the item is out on temporary loan, the Check Out Number identifies the specific transaction on which it is recorded. Checking out an asset does not affect its location or assigned department; the Check Out record contains complete details of the client who has assumed temporary responsibility for the item. When an item is checked back in, the Check Out Number field is set back to zero. |
| View Checkout: | Display the transaction form on which this asset is currently checked out. |
| View History: | Display a chronological history for this asset, most recent date first. You cannot edit or delete log records, but you can add notes. Enter the note on the last line of the list; by default the date and time will be set by the system clock. The next time you view the list, the note will be sorted into its correct chronological position. |
| Need Label: | If this asset needs a new label, check this box. When the Print Asset Tags function is selected from the Main Menu, new labels will be printed for all assets which have this box checked. |
| Done Button: | Click this button when you are done with the screen. All changes will be automatically saved. |
| Cancel Button: | Exit the screen without saving changes. |
| Dispose: | This button marks an asset as disposed and records the date of and reason for disposal. The asset record is retained on the database, but will not appear on the Asset Selection screen unless the Include Old Assets box is checked. |

## Clients

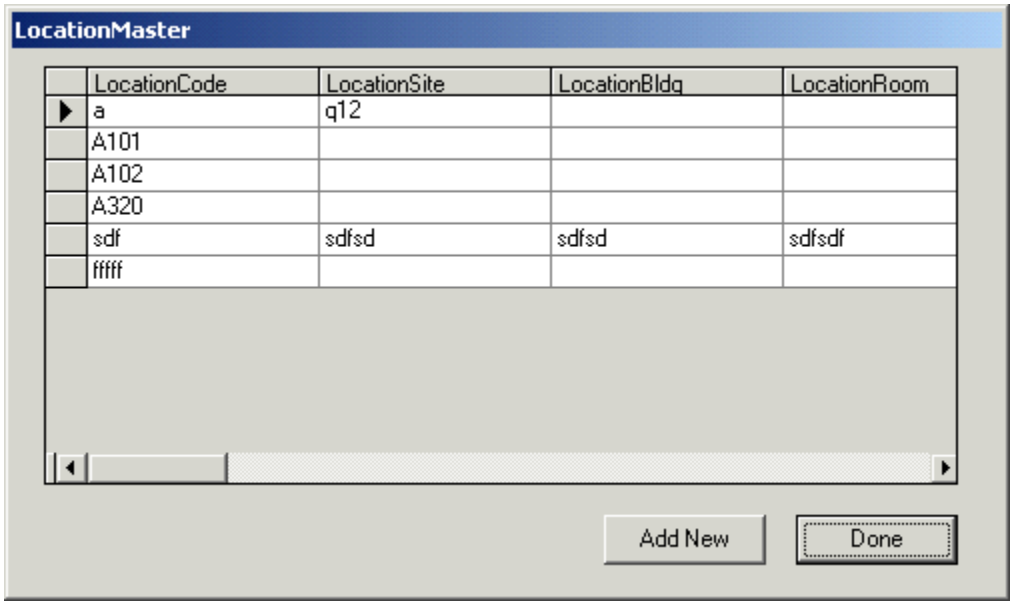



This screen displays a list of clients, the organizations that routinely check out assets on a temporary basis. Use the scroll bars to move around the list. Click on any column heading to sort the records by that column (click once for ascending order, again for descending order).

To display the client edit screen, double click the grey box at the left end of the desired display row or, to create a new client record, click the Add New button.



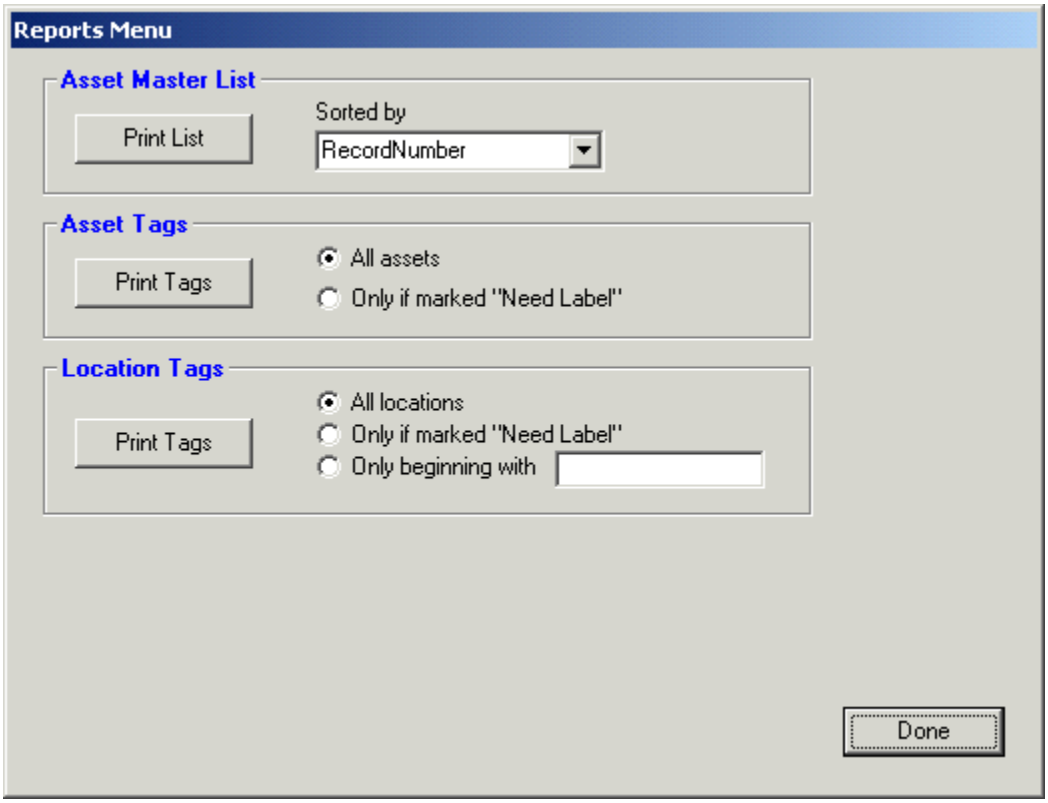
## Locations




Use this screen to maintain the list of locations within your organization. Each location should be assigned a code; this is the number that will appear on the barcoded location labels. Each location code can be described by Site (city or campus, for example), Building, Room number, and area (section or cubicle within a room).

The Need Tag checkbox indicates if a barcode label is needed for each location (labels can be printed from the Reports/Labels screen accessible from the Main Menu). When printing labels, an option is available to all records or only checked records.

## Report Menu




This menu provides access to the basic reports provided by the system.

Asset Master List

Print a list of all assets on record. Use the scrolling list to the right of the button to select the sort order: Name, Department, Location, etc.

Asset Tags

Print asset identification barcode labels. Click on All Assets to print a label for every asset, or on Only if Marked for only for those assets whose Need Label box is checked (see the Asset Master edit screen. The system will print labels on any laser (recommended) or inkjet printer using labels 2.625 inches wide x 1.0 inches high, 30 per sheet. The Company name as entered in the setup screen will appear at the top of each label.

Location Tags

Print barcode labels to identify locations. Select all locations or only those specifically checked as Need Label (see the location edit screen). To print a group of similar locations, select Only Beginning With and fill in the beginning characters that the location codes should match. For example, B3 will select all locations beginning with B3... B322, B3ABCD, B3995RR, and so on.

***Note on pre-printed labels:*** *Using a laser or inkjet printer effectively limits the label material to paper. In applications where environmental conditions require a more durable label material, it may be advisable to have asset tags preprinted by a properly equipped outside service.*

## Checkout / Checkin

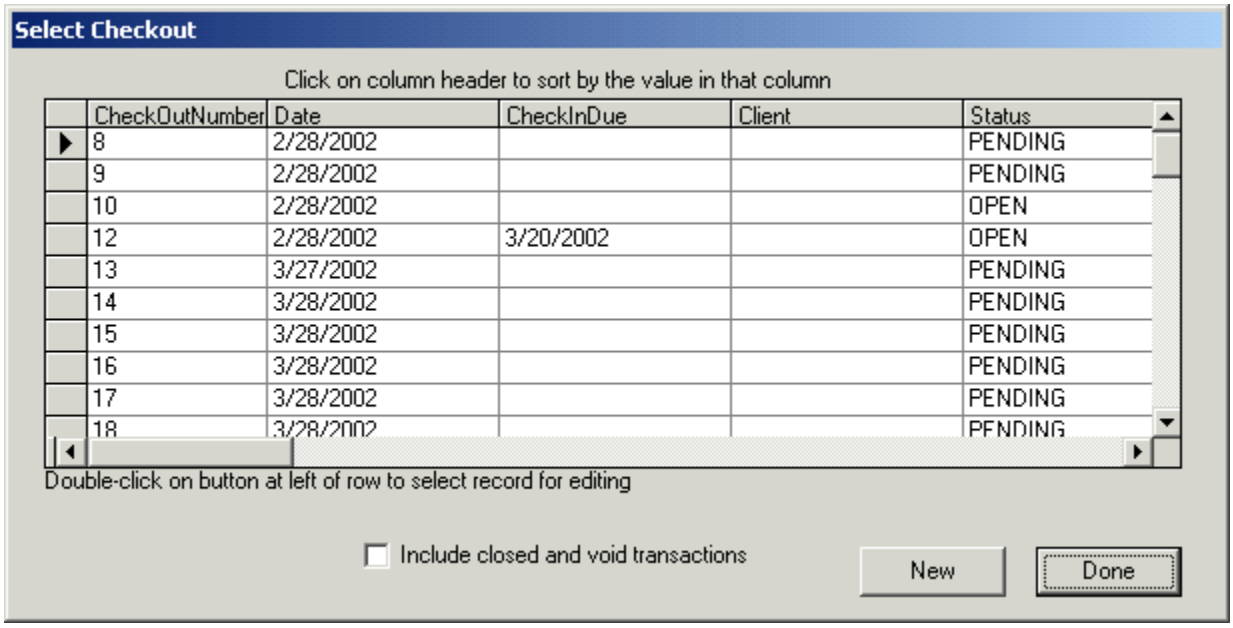
The Checkout / Checkin feature provides a convenient method for keeping track of assets that are routinely lent out on a temporary basis. Every time items are checked out, a transaction permanently records a complete list of items, the person and organization receiving them, and the date they are due back in.

Each transaction has a current status:

| | |
|---|---|
| PENDING | Information entered, but items not yet picked up |
| OPEN | Items have been picked up and have not been returned |
| CLOSED | All items have been returned |
| VOID | The transaction has been voided |

Every new transaction begins life with a Pending status. When the items are picked up by the client, the transaction document is printed to serve as a physical receipt and the status of the transaction automatically changes to Open. Once a transaction is Open, it will remain open until every item checked out has been returned. When all items are returned, the status of the transaction changes to Closed. Only Pending transactions may be voided, and only then after all items are removed from its list of items to be checked out.

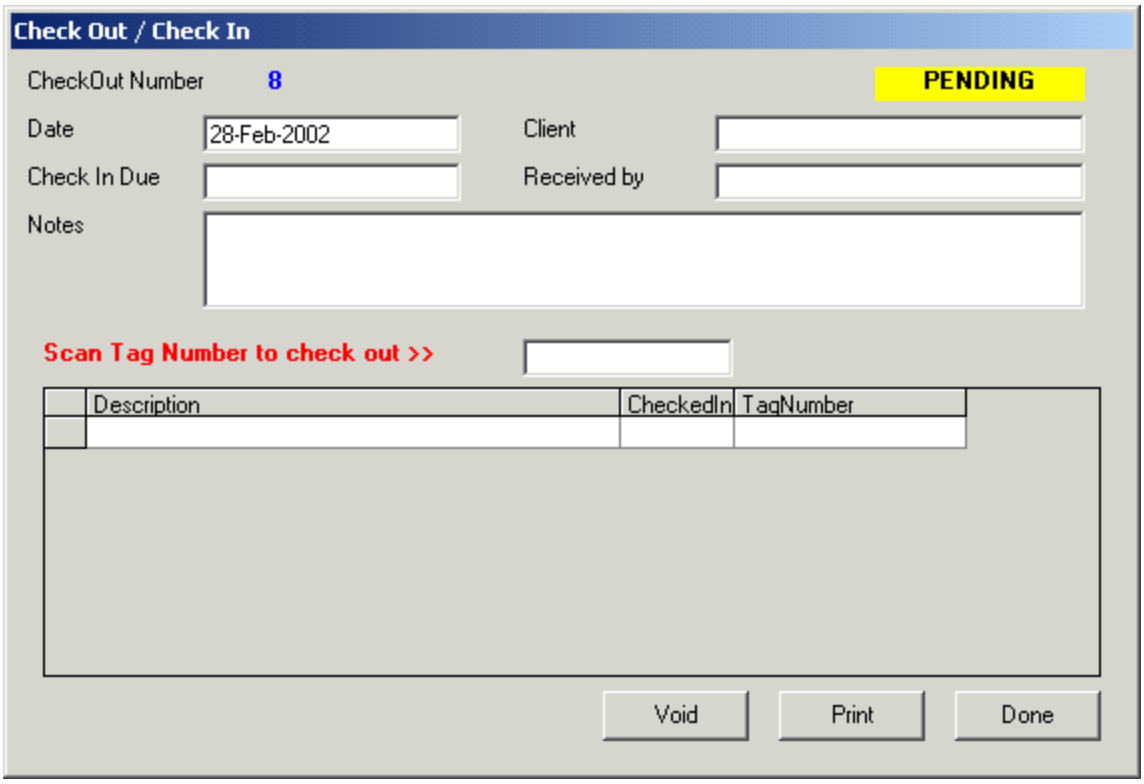
The Select Checkout screen displays a list of transactions that are Pending or Open; a checkbox permits including Closed and Void transactions as well.




Click on the legend at the top of any column to sort the list in the order of that column; click once for ascending order, click again for descending. Click the New button to create a new Checkout transaction, or double-click the gray button at the left of a row to display the details for that particular transaction.

The current date is automatically filled in on new transactions, although it may be changed manually if the transaction is being created ahead of time. Fill in the Client, the Check In Due date, and any

notes (where the items will be used, intended purpose, notes on condition, etc.). The Received By field is intended for the name of the person actually picking up the items.




To add an items to the list, simply scan its asset tag with a keyboard wedge barcode scanner or type in the asset tag number on the keyboard. The system will look up the item, verify that it is available for checkout, and fill in the descriptive information. The asset's master record will be updated to show the Checkout Number.

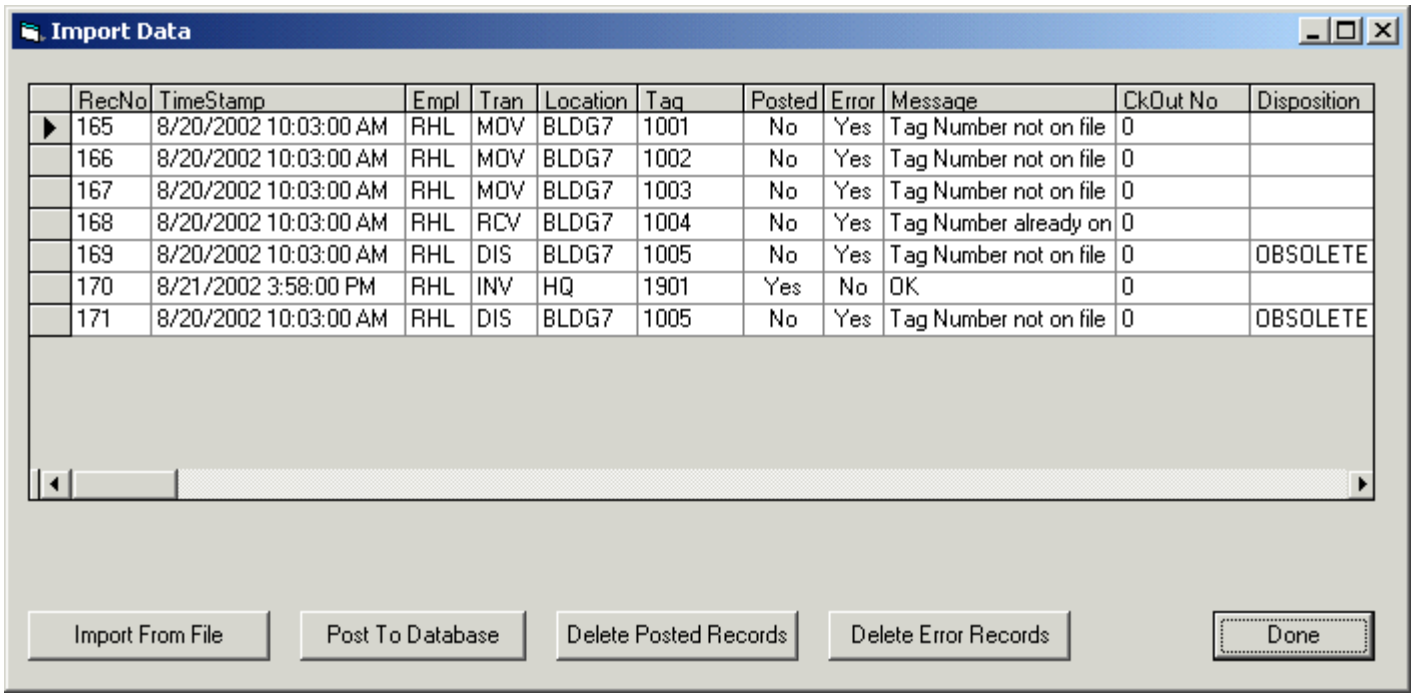
When all items have been entered and are ready for pickup, click on the Print button. The system will print a Checkout transaction report and change the status of this transaction to Open.

The Select Checkin screen is similar to the one used for Checkout except that it only displays transactions with a status of Open. The sorting of the list may be changed by clicking on the legend at the top of any column, and a specific transaction may be selected by double-clicking on the gray button at the left of any row. A transaction may also be selected by scanning the asset tag of any item that is a part of that transaction.

The Checkin screen is similar to the Checkout screen except that it is concerned only with the return of items that were checked out on that transaction. Scanning an item that was not checked out on that particular transaction will produce a pop-up error message, as will scanning an item that has already been checked in. As each item is scanned, its Asset Master record is updated to show that it is no longer checked out.

When all of the items have been checked in, the system will change the status of the transaction to Closed. Until everything has been returned, the transaction will remain Open; un-returned items remain allocated to the client who checked them out.

## Import Data


Import Data
RecNo TimeStamp Empl Tran Location Tag Posted Error Message CkOut No Disposition
165 8/20/2002 10:03:00 AM RHL MOV BLDG7 1001 No Yes Tag Number not on file 0
166 8/20/2002 10:03:00 AM RHL MOV BLDG7 1002 No Yes Tag Number not on file 0
167 8/20/2002 10:03:00 AM RHL MOV BLDG7 1003 No Yes Tag Number not on file 0
168 8/20/2002 10:03:00 AM RHL RCV BLDG7 1004 No Yes Tag Number already on 0
169 8/20/2002 10:03:00 AM RHL DIS BLDG7 1005 No Yes Tag Number not on file 0 OBSOLETE
170 8/21/2002 3:58:00 PM RHL INV HQ 1901 Yes No OK 0
171 8/20/2002 10:03:00 AM RHL DIS BLDG7 1005 No Yes Tag Number not on file 0 OBSOLETE
Import From File
Post To Database
Delete Posted Records
Delete Error Records
Done

One of the key features of the Fixed Assets System is the ability to import data collected in the field; this data is typically collected with portable barcode scanners, but can come from any source which can create a comma-delimited text file. The process is divided into two steps. First, data is imported into the ScannerUpload table where it is visible on the screen. The second step (posting) transfers the contents of the ScannerData table to the main inventory records.

The Fixed Assets System reads data from comma-delimited ASCII text files. Each line in the file represents a separate record, and fields are separated by commas. If a field is left blank the separating comma must still appear. The layout of fields in each record depends on the type of transaction:

```
<TimeStamp>,<Employee>,RCV,<TagNumber>,<Location>,<Description>
<TimeStamp>,<Employee>,DIS,<TagNumber>,<Location>,<Reason>
<TimeStamp>,<Employee>,MOV,<TagNumber>,<Location>
<TimeStamp>,<Employee>,INV,<TagNumber>,<Location>
<TimeStamp>,<Employee>,CKO,<TagNumber>,<Checkout  Number>
<TimeStamp>,<Employee>,CKI,<TagNumber>,<Checkout  Number>
```

For example, the following records indicate that several assets have been moved (MOV) to location BLDG7, and that one asset has been disposed of (DIS) because it is broken:

```
8/20/02  10:07,JJD,MOV,1023,BLDG7
8/20/02  10:07,JJD,MOV,1233,BLDG7
8/20/02  10:08,JJD,MOV,1106,BLDG7
8/20/02  10:08,JJD,MOV,1048,BLDG7
8/20/02  10:09,JJD,DIS,1192,BLDG7,BROKEN
```

Here is a summary of the transaction codes recognized by the system:

**RCV Receive new asset into the system**
A new asset record is created; Variable 1 is stored as the location, Variable 2 is used as the description of the item, and the asset's status is marked as ACTIVE. If an asset with the same tag number is already on file, the new record will not be created and the scanner record will be marked with an error. The transaction is recorded in the ChronoLog table.

**DIS Dispose of asset**
The asset's status is marked as DISPOSED; Variable 1 is stored as the location where the disposition occured, and Variable 2 is stored as the reason for disposition. If the asset cannot be found on file the record will not be posted. The transaction is recorded in the ChronoLog table.

**MOV Move asset**
The asset's location is updated to the new location given in Variable 1. If the asset is not on file the scanner record is marked with an error and not posted. The transaction is recorded in the ChronoLog table.

**INV Physical Inventory**
The asset's tag number and location (Variable 1) are added to the current physical inventory. If the asset is already listed on the current physical inventory, the location is updated. The asset is recorded on the physical inventory even if it is not on file in the main data tables. This transaction is not recorded in the ChronoLog table; this is done later when the finished physical inventory is committed to storage.

**CKO Check Out**
The asset is marked as Checked Out and tagged with the Checkout Transaction Number (Variable 1), typically scanned from a worksheet printed when the Checkout Transaction was created. It the Checkout Transaction does not exist or has been closed, or if the asset is not on file the record will not be posted. The record is not recorded in the ChronoLog table; this is done when the Checkout Transaction is finalized.

**CKI Check In**
The asset is marked as checked in. If the Checkout Transaction number does not exist, is closed, if the item is not checked out, or if the asset is not on file the record will not be posted. The record is not recorded in the ChronoLog table; this is done when the Checkout Transaction is closed.

Click Post to Database to transfer information to the main database. If a record is successfully posted, the Posted field will be set to "Yes" and the message field will be set to "OK". With the exception of INV, CKO, and CKI transactions, an entry is made in the ChronoLog table each time a record is posted. ChronoLog provides a complete history for every asset in the system; each log entry includes the Tag Number, Time Stamp, and a Comment. For example, here is a snippet of upload file with three transactions:

```
5/20/2002 11:07,RHL,MOV,A0004985
```

```
5/20/2002 11:35,AAE,RCV,A0005345,RM330,500MHZ PENTIUM COMPUTER
5/20/2002 11:44,CJV,DIS,A0004201,DCK3,DAMAGED
```

When these records are posted, the following entries will be added to the ChronoLog table:

```
5/20/2002 11:07 AM  A0004985     Moved from R27 to B5 by RHL
5/20/2002 11:35 AM  A0005345     Received at RM330 by AAE
5/20/2002 11:44 AM  A0004201     Disposed from DCK3 by CJV because DAMAGED
```

If a record cannot be posted, the Error field will be set to “Yes” and an explanation of the problem will appear in the Message field. Click Delete Posted Records or Delete Error Records to remove records from the list. You may erase a single record by clicking on the gray button at the left of its row and pressing the Delete key. Records shown on the screen may not be edited manually. If there is an error, the record must be deleted and then re-entered using the data collection procedure used to capture the data originally (barcode scanner, for example).

**Writing Directly to the ScannerUpload Table**

Instead of importing data through an ASCII text file, external software may write directly to the ScannerUpload table. For example, the Mini Data Capture System from MEC Software can be configured to do this. In-house software which can interact with Microsoft Access 2000 databases can be adapted to write directly to the ScannerUpload table; it is recommended that this be done only by experienced programmers.

The ScannerUpload table includes the following fields. The RecNo field is automatically filled in by the database system when each record is created. The Posted, Error, and Message fields are filled in automatically by the Fixed Asset System’s Post Data function.

| | | |
|---|---|---|
| RecNo | autonumber (long) | 8 bytes |
| TimeStamp | date/time code | 8 bytes |
| Employee | text | 30 characters |
| Transaction | text | 20 characters |
| LocationCode | text | 30 characters |
| TagNumber | text | 30 characters |
| Posted | Boolean (yes/no) | 1 byte |
| Error | Boolean (yes/no) | 1 byte |
| Message | text | 50 characters |
| CheckOutNumber | long integer | 8 bytes |
| Disposition | text | 50 characters |
| Description | text | 50 characters |

The Description field contains a description of the item in RCV (Receive) transactions, and is used for the reason for disposal in DIS (Dispose) transactions.

**Network issues**

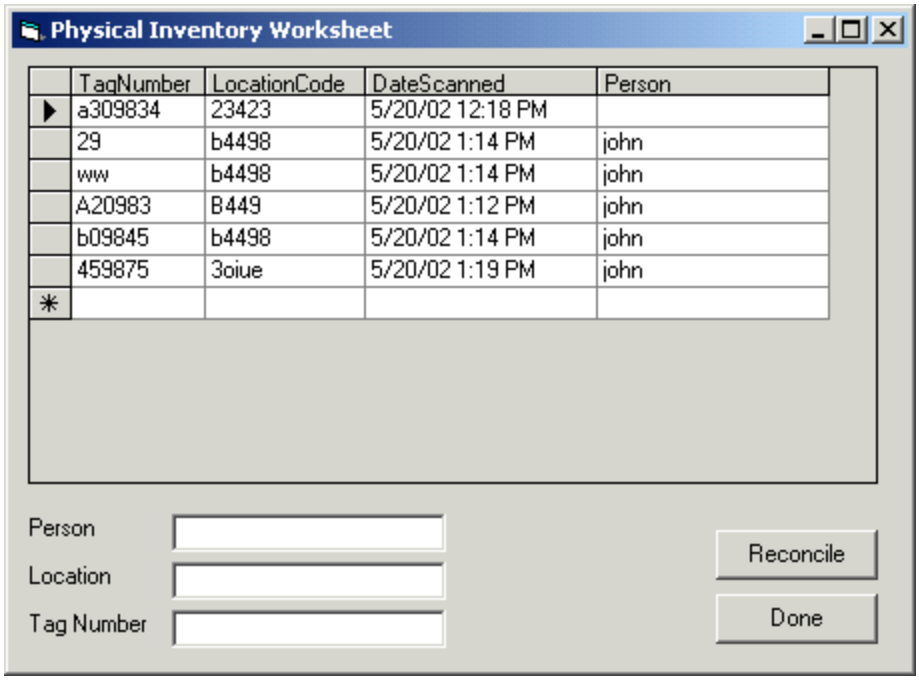
Each copy of the Fixed Assets software may point at only one ScannerUpload table. In a networked system with Fixed Assets running on more than one workstation, the system administrator has the option of having a local ScannerUpload table at each workstation, or a single shared ScannerUpload table in a network location, or a mixture. The best structure will depend on the number of portable scanners being used and the architecture of the system.

The simplest arrangement is to have a local ScannerUpload table at each workstation where portable scanners are uploaded, and to post the scanner data directly after uploading. In larger systems where operators upload data at multiple workstations and where posting is done later at a central workstation, it may be more effective to upload raw scanner data to a single centralized comma-delimited text file (or directly to the ScannerUpload table) and then post from there. If the uploading process is automated to any degree, even to the point of using real-time upload of data from wireless scanners, then collection of raw scanner data in a centralized ScannerUpload table will have advantages.

## Physical Inventory

The purpose of physical inventory is to actually find every asset and confirm that everything is where it should be. Taking a physical inventory begins with an empty list that will be filled in with information about assets located during the inventory. It is *very important* to begin with an empty list to avoid including data left over from an earlier inventory. The Save to Archive function, typically done at the conclusion of an inventory, automatically cleans out the list.

The Physical Inventory Worksheet displays the contents of the working list and allows manual entries and deletions. Inventory data collected with portable barcode scanners is posted to the same list and is visible on the worksheet screen.



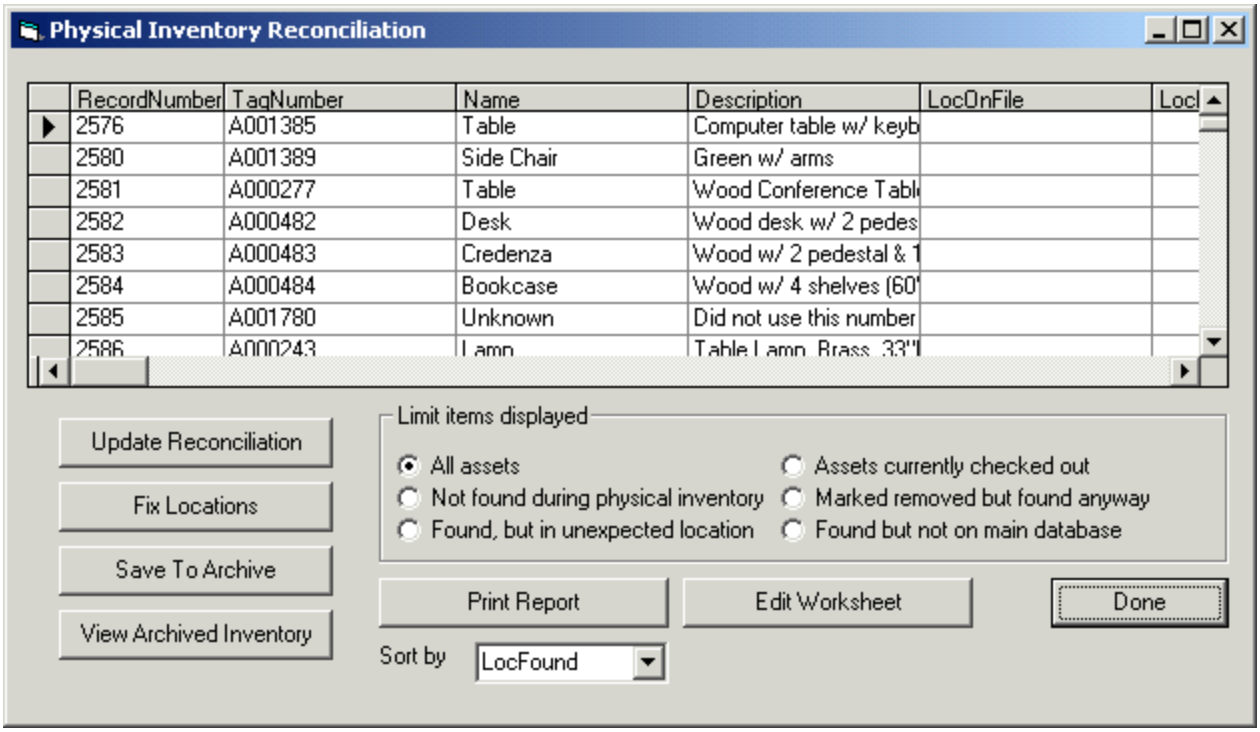

To add new entries to the worksheet, fill in the name or initials of the person entering the data, the location in which the assets were found, and then type in the Tag Number of each asset. If the asset is already on the worksheet, the person and location will be updated; If the asset is not on the worksheet yet, it will be added automatically. The DateScanned field is filled in automatically. You may change the person or the location at any time and continue entering Tag Numbers.

To sort the records in a different order, just click on the legend at the top of a column to sort by that column; click a second time to sort in reverse order. Click Done to return to the Main Menu; the worksheet entries are automatically saved.

After all (or at least most) of the assets have been found and recorded with a portable barcode scanner or the worksheet, the next step is to reconcile: compare assets that have actually been located with what is on file in the database. Click on the Reconcile button to go to the Physical Inventory Reconciliation screen.

This screen lists all of the assets on file along with the locations in which they were found during the physical inventory. The screen includes assets that were not found, assets that were found but in

an unexpected location, assets that were found but that the database thought had been disposed of, and assets that were not found but are currently checked out.Click on the Update Reconciliation button to bring the list up to date.




To sort the list in a different order, click on the legend at the top of any column to sort by the data in that column; click a second time to sort in descending order. Double-click the gray button at the left of any row to display the asset master screen for that item.

Resolving discrepancies is most easily done by looking only at exceptions. Use the selection buttons to limit the items displayed to specific types of exceptions. Exceptions may be resolved manually by editing the Asset Master record (double-click on the button at the left of the desired row). One of the most common discrepancies is finding an asset, but in an unexpected location. In this case clicking on the Fix Locations button will automatically update the Asset Master records to reflect the location in which assets were actually found.

It may be useful to print a reconciliation report to help in resolving lingering discrepancies. The order in which items are listed on the report may be selected; sorting by on-file location or by the department which has custody are often most useful for taking the list and tracking down the missing items.

Once a current physical inventory is complete, all discrepancies have been resolved, and all reports have been printed, the data can be archived. The current physical inventory is given a unique name and is transferred to an archive data table. You will be able to view and print the contents of